Android Automotive SIG - VHAL

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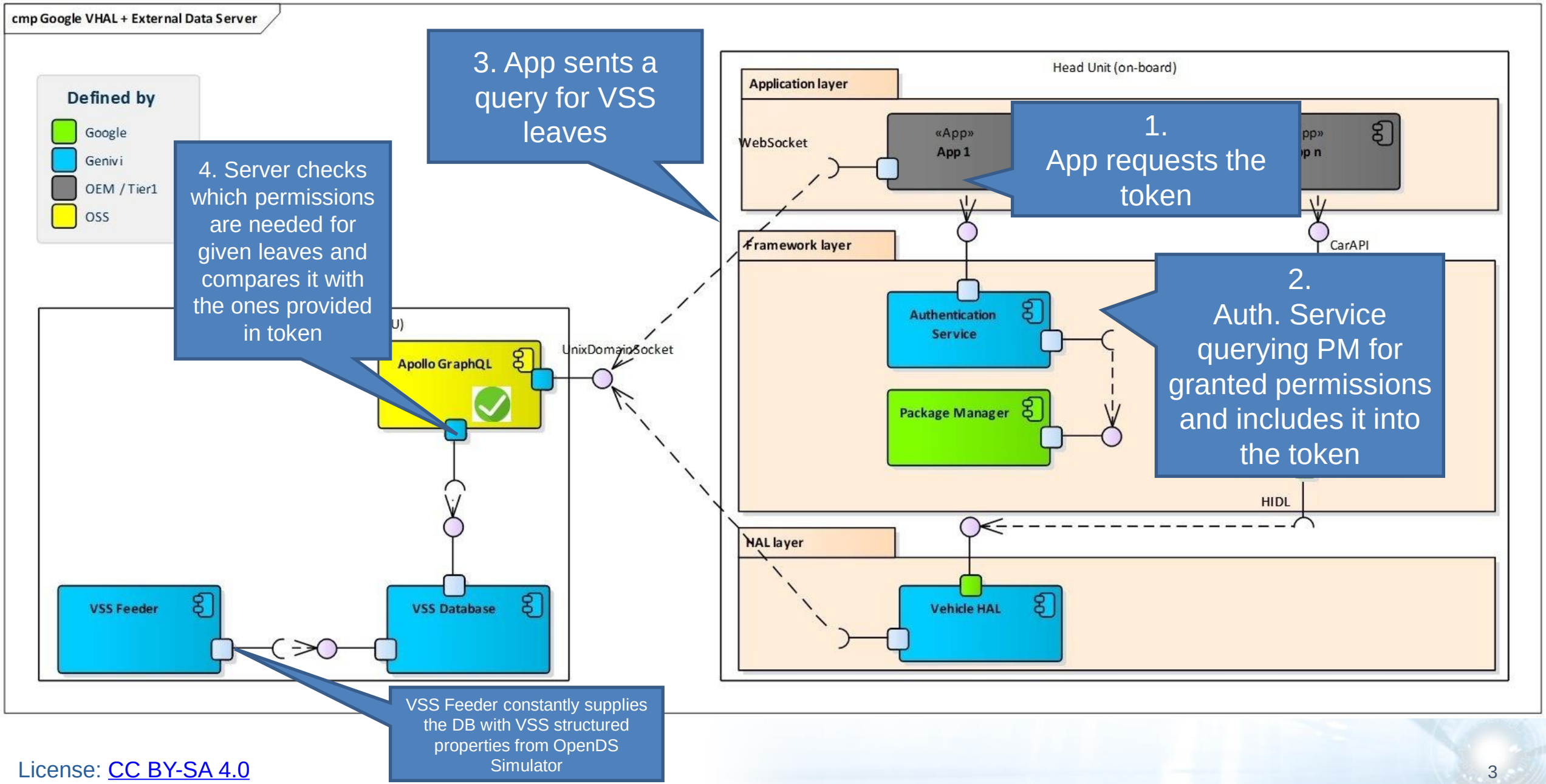
Track 1

Usecase:

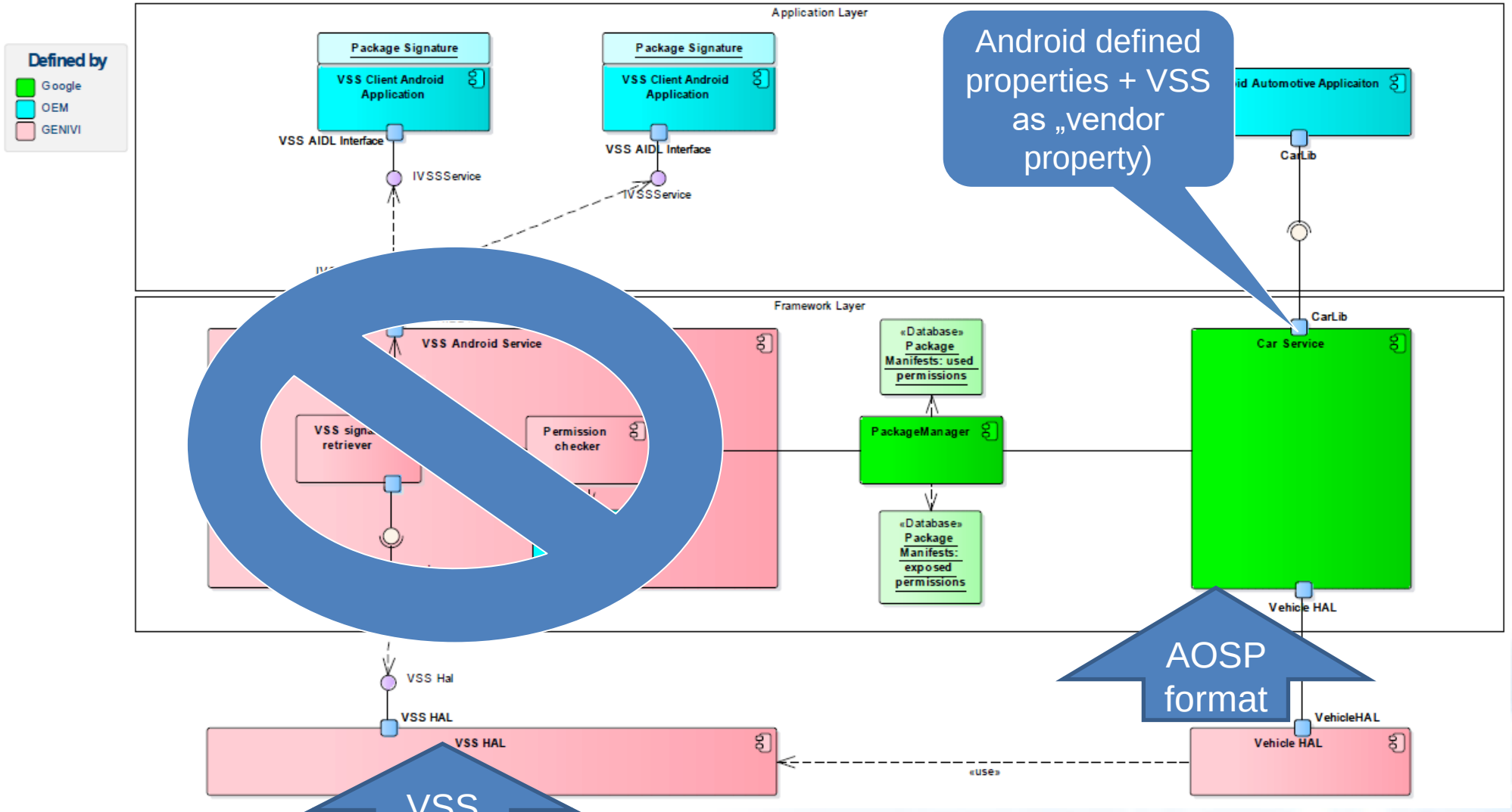
- Application wants to read the current fuel level and the tank capacity

Requirements:

- Read access for signals needs to be protected by a permission: org.genivi.vss.permission.FUEL_SYSTEM_READ
- Permission needs to be granted by an authority which is secure
- Data needs to be defined and structured according to VSS
- Data needs to be accessible by the framework as well



Track 2



Track 2 - vehicle HAL implementation

- Flat the VSS hierarchy
- Map some of the „fields” to the one supported by hidl
- Loose „branch” type for grouping the properties
- Translation module for properties that are defined differently by both standards (translation of units or datatypes)

```
#
# Tire
#
- Tire:
  type: branch
  description: Tire signals for wheel

- Tire.Pressure:
  datatype: uint8
  type: sensor
  unit: kpa
  description: Tire pressure in kilo-Pascal
```

Vss2android.py

```
/**
    * Tire pressure
    *
    * min/max value indicates tire pressure sensor range.  Each tire will have a separate min/max
    * value denoted by its areaConfig.areaId.
    *
    * @change_mode VehiclePropertyChangeMode:CONTINUOUS
    * @access VehiclePropertyAccess:READ
    * @unit VehicleUnit:KILOPASCAL
    */
   TIRE_PRESSURE = (
      0x0309
      | VehiclePropertyGroup:SYSTEM
      | VehiclePropertyType:FLOAT
      | VehicleArea:WHEEL),
```

Contributing

Weekly telcos:
Tuesdays – 17:00 CET (US friendly time) – Vehicle Data APIs / VHAL
Android Automotive Project Wiki :
https://at.projects.genivi.org/wiki/x/XgA4Ag

Thank you!

Contact W3C Transport and Automotive groups:

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https://www.w3.org/auto/

Visit GENIVI:

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